

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

		·			
APPLICATION NO.	. FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/789,599	02/27/2004	Mark Spellman	11336/602 (P04021US)	9045	
27879 Indianapoi	27879 7590 06/13/2007 INDIANAPOLIS OFFICE 27879			EXAMINER	
BRINKS HOFER GILSON & LIONE			LE, LANA N		
ONE INDIANA SQUARE, SUITE 1600 INDIANAPOLIS, IN 46204-2033			ART UNIT	PAPER NUMBER	
	, ,		2618		
			· •	······································	
			MAIL DATE	DELIVERY MODE	
	•		06/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/789,599	SPELLMAN, MARK
Office Action Summary	Examiner	Art Unit
·	Lana N. Le	2618
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period we failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the course the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).
Status		
 1) ⊠ Responsive to communication(s) filed on 16 M 2a) ⊠ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for alloward closed in accordance with the practice under E 	action is non-final.	
Disposition of Claims		
 4)	wn from consideration. 30,35-46 is/are rejected.	he application.
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the drawing(s) be held in abeyance. Sometion is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicative documents have been rece u (PCT Rule 17.2(a)).	ation No ived in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 31607	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:	

Art Unit: 2618

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4, 6-10, 15, 18, 20-22, 26-27 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al (US 5,910,996) in view of Moers (US 6,957,053).

Regarding claims 1 and 36, Eggers et al disclose a radio receiver (fig. 3) and audio system comprising: a first tuner (34) configured to connect with an inherent antenna and to generate a first audio signal; a second tuner (35) configured to connect with the antenna and to generate a second audio signal; a switching circuitry (41) connected with the first tuner (34) and the second tuner (35) configured to receive the first audio signal and the second audio signal, where the first audio signal and the second audio signal are processed by the switching circuit to generate a first audio output signal (audio output to 42) and a second audio output signal (audio output to 43);

a first audio power amplifier (42) connected with the switching circuit and configured to receive the first audio output signal; and a second audio power amplifier (43) connected with the switching circuit configured to receive the second audio output signal (col 2, lines 35-41; col 3, lines 16-30; col 6, lines 5-10). Eggers et al do not

Art Unit: 2618

disclose a DSP circuitry for digitally processing the first audio signal to generate a second processed audio output signal and to also digitally process the second audio signal to generate a second processed audio output signal. Moers discloses a DSP (6) for digitally processing the first audio signal to generate a second processed audio output signal and to also digitally process the second audio signal to generate a second processed audio output signal (fig. 1) (col 3, line 64 - col 4, line 4; col 4, lines 23-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a digital signal processor in order to digitally process and enhance the sound of the audio signals.

Regarding claim 2, Eggers et al and Moers disclose the radio receiver of claim 1, wherein Moers disclose the receiver comprising a control unit (12) connected (via 4) with the first tuner (3) and (via 7) the second tuner (2).

Regarding claim 3, Eggers et al and Moers disclose the radio receiver of claim 2, where Moers discloses the control unit (12) is operable to generate a first tuner control output (via I/O 11) that is used to set the first tuner (3) to a first selected frequency (col 3, lines 45-48).

Regarding claim 4, Eggers et al and Moers disclose radio receiver of claim 3, where Moers disclose the control unit (12) is operable to generate a second tuner control output (via I/O control 11) that is used to set the second tuner (2) to a second selected frequency (col 3, lines 45-48).

Regarding claim 6, Eggers et al and Moers disclose the radio receiver of claim 5, where Moers disclose first tuner (3) is configured to generate a first tuner signal quality

Art Unit: 2618

signal, and where the control unit (12) is configured to receive the first tuner signal quality signal, and to detect that the first tuner signal quality signal is less than a predetermined threshold of signal quality, and in response to the detection, to adjust the first tuner to a first tuner alternate frequency setting (col 5, lines 6-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to change the first tuner frequency to an AF which contain the same program which has a clearer reception.

Regarding claim 8, Eggers et al and Moers disclose radio receiver of claim 6, where Moers discloses where the second tuner is configured to generate a second tuner signal quality signal, and the control unit is further configured to receive the second tuner signal quality signal, and to detect that the second tuner signal quality is less than the predetermined threshold of signal quality, and in response to the detection operable to adjust the second tuner to a second tuner an alternate frequency setting (col 3, line 64 - col 4, line 4; col 6, lines 36-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to change the second tuner frequency to an AF which contain the same program which has a clearer reception.

Regarding claim 9, Eggers et al and Moers disclose the radio receiver of claim 1, Moers disclose the receiver comprising a first radio data system decoder (4) connected with the first tuner (3) and a control unit (12) and the first radio data decoder is configured to generate first tuner data related to the first tuner. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a decoder and a control unit in order to extract RDS data from the demodulated data as

Art Unit: 2618

suggested by Moers (col 4, lines 42-44).

Regarding claim 15, Eggers et al and Moers disclose the radio receiver of claim 1, where Eggers et al disclose the first audio power amplifier (42) is connected with at least one speaker (5).

Regarding claim 18, Eggers et al disclose a radio receiver comprising: a control unit (41);

a first tuner (34) connected with the control unit, and the control unit configured to tune the first tuner to a first tuner frequency setting; a second tuner (35) connected with the control unit and the control unit configured to tune the second tuner to a second tuner frequency setting (col 5, lines 21-44);

the control unit (41) connected with the first tuner (34) and the second tuner (35) configured to generate a first audio output signal as a function of the first frequency setting of the first tuner and a second audio output signal as a function of the second frequency setting of the second tuner (see fig. 3; col 3, lines 16–53; col 2, lines 10-12; col 6, lines 4-29);

a first audio power amplifier (42) connected with the switching circuit (41) and the first audio power amplifier configured to receive the first audio output signal; and

a second audio power amplifier (43) connected with the switching circuit (41) configured to receive the second audio output signal.

Eggers et al do not disclose a digital signal processor connected with the first tuner and the second tuner, and the DSP configured to generate a first digitally processed audio output signal as a function of the first tuner frequency setting and to also generate a

Art Unit: 2618

second digitally processed audio signal as a function of the second tuner frequency setting. Moers discloses a digital signal processor (6) connected with the first tuner (3) and the second tuner (2) and the DSP configured to generate a first digitally processed audio output signal as a function of the first tuner frequency setting and to also generate a second digitally processed audio signal as a function of the second tuner frequency setting (fig. 1) (col 4, lines 23-34; col 3, line 45 - col 4, line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a digital signal processor in the receiver of Eggers et al in order to digitally process and enhance the sound of the audio signals.

Regarding claim 19, Eggers et al and Moers disclose the radio receiver of claim 18, where the control unit (41) is configured to tune the first and second tuner to the first and second frequency settings.

Regarding claim 20, Eggers et al and Moers disclose the radio receiver of claim 18, wherein Moers discloses the receiver comprises a first and second radio data system decoder (4 and 7) connected with the respective first tuner (3) and second tuner (2) and configured to provide respective first and second tuner RDS data; the control unit (12) is further configured to receive the respective first tuner RDS data and second tuner RDS data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have two decoders in order to extract RDS data from the demodulated data of each respective tuner as suggested by Moers (col 4, lines 42-44).

Regarding claim 21, Eggers et al and Moers disclose the radio receiver of claim 20, where Moers discloses the first tuner RDS data (output of 4) comprises a list of first

Art Unit: 2618

tuner alternative frequencies for the first tuner frequency setting (col 5, lines 6-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have AFs for the first tuner to tune to another frequency with the same program which has better reception.

Regarding claim 22, Eggers et al and Moers disclose the radio receiver of claim 21, where Moers discloses the first tuner (3) is configured to produce a first tuner signal quality signal, and the control unit is configured to receive the first tuner signal quality signal and to detect that the first tuner signal quality signal falls below a predetermined level of quality and, in response to the detection, to tune the first tuner to one of the listed first tuner an alternate alternative frequencies (col 5, lines 48-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to tune to an AF having a better FM reception as is well known in an FM receiver.

Regarding claim 26, Eggers et al and Moers disclose the radio receiver of claim 25, where the second tuner RDS data (output of 7) comprises a list of alternative frequencies for the second tuner (2) frequency setting (col 4, lines 42-44; col 5, lines 6-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have AFs to tune the second tuner to another frequency with the same program which has better reception.

Regarding claim 27, Eggers et al and Moers disclose the radio receiver of claim 22, where Moers discloses the second tuner (2) is configured to generate a second tuner signal quality signal, and the control unit (12) is configured to detect that the second tuner signal quality output is less than a predetermined level of quality and, in

Art Unit: 2618

response to the detection, to tune the second tuner to one of the listed second tuner an alternative frequencies (col 5, lines 6-67; col 6, lines 36-37).

Regarding claim 28, Eggers et al and Moers disclose the radio receiver of claim 25, where the radio data system decoder (7) is configured to provide data to the control unit (12) associated with the second frequency setting.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers, Moers and further in view of Whikehart et al (US 7,106,809).

Regarding claim 5, Eggers and Moers disclose the radio receiver of claim 1, wherein they do not disclose the radio receiver of claim 1 where the first audio signal and the second audio signal are digitally processed simultaneously by the digital signal processor. Whikehart discloses DAB signals from tuners 88 and 90 are simultaneously digitally processed (via digital processing circuit 92, 96, 94, 98; fig. 4; col 2, lines 59-63; col 9, line 61 – col 10, line 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to simultaneously digitally process both the signals from the two tuners in order to provide duplicate processing to optimize fidelity and minimize interference as suggested by Whikehart et al (col 9, lines 50-52).

3. Claims 11-12, 29, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al (US 5,910,996) in view of Moers (US 6,957,053) and further in view of Miyake (US 6,038,434).

Regarding claim 11, Eggers et al and Moers disclose the radio receiver and method of claims 10 and 23 respectively, where Eggers et al and Moers do not disclose a display unit operably coupled to the control unit, and the control unit is configured to

Art Unit: 2618

receive the first tuner data (from 3) and to control the display unit to display the first tuner data. Miyake discloses a display unit (13) operably coupled to the control unit, and the control unit (7) is configured to receive the first tuner data and to control the display unit to display the first tuner (fig. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to display data on a display in order to show to the user the RT data outputted from the memory buffer.

Regarding claim 12, Eggers et al, Moers, and Miyake disclose the radio receiver of claim 11 wherein Moers discloses further comprising a second radio data system decoder (7) connected with the second tuner (2) and the control unit (12) and the second radio data system decoder (7) is configured to provide second tuner data related to the second tuner to the control unit, and wherein Miyake discloses the control unit (7) is further configured to control the display unit (13) to display the second tuner data (fig. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a second decoder to decode RDS data of the second tuner if the second tuner also contain RDS data.

4. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al, Moers, Huemann in view of Miyake (US 6,038,434) and Usui et al (US 5,678,217).

Regarding claim 40, Eggers et al, Moers and Huemann disclose the radio receiver and method of claim 39, where Eggers et al, Moers, and Huemann do not disclose the data is displayed on a display connected with the control unit. Miyake discloses a display unit (13) operably coupled to the controller (7) (fig. 3). They do not

Art Unit: 2618

disclose where the first and second radio tuner RDS data comprise respective first and second radio tuner RDS data parameters; and the controller is configured to control the display unit to display a portion of the first and second radio tuner RDS data parameters. Usui disclose displaying signals from first and second tuners in a split display mode. It would have been obvious to one of ordinary skill in the art at the time the invention was made to display data on a display in order to show to the user the RT data outputted from the memory buffer and signals from first and second tuners.

Regarding claim 41, Eggers et al, Moers, Huemann and Miyake disclose the method of claim 40, wherein Moers disclose the audio system further comprising a user input device (21-24) operably coupled to the controller and configured to receive a user command to independently control the respective first and second radio tuners (2, 3) (col 3, lines 53-56; col 5, lines 48-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have user input in order to allow the user a broader range of options in selecting audio programs as suggested by Moers.

5. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al, Moers, and further in view of Miyake (US 6,038,434) and Usui et al (US 5,678,217).

Regarding claim 29, Eggers et al and Moers disclose the radio receiver of claim 26, where Eggers et al and Moers do not disclose a display unit operably coupled to the control unit, and the control unit further configured to control the display unit to display a portion of the first tuner RDS data and the second tuner RDS data. Miyake discloses a radio receiver where the data is displayed on a display (13) operably coupled with the

control unit (7) (fig. 3) and the control unit further configured to control the display unit to display the first tuner RDS data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have Eggers display data of a portion of each the tuner on a display in order to show to the user the RT data outputted from the memory buffer. Eggers, Moers, and Miyake do not disclose displaying a portion of the first tuner RDS data and the second tuner RDS data. Usui et al disclose displaying a portion of the first tuner RDS data and the second tuner RDS data (col 3, lines 53-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to display via a split screen mode in order to display data from the signals of both tuners.

4. Claims 16-17, 30, 35 and 37-39, 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al (US 5,910,996) in view of Moers (US 6,957,053) and further in view of Huemann et al (US 5,661,811).

Regarding claims 16 and 37, Eggers et al and Moers disclose the radio receiver of claims 1 and 36 respectively, where Eggers et al and Moers do not disclose the second audio power amplifier is connected with a headphone jack. Huemann et al disclose a second power amplifier (24) is connected with a headphone jack (38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a headphone jack connected to the power amplifier in order to allow back passenger to hear the audio signal without hearing the front passenger's audio output or vice versa.

Art Unit: 2618

Regarding claim 30, Eggers et al and Moer disclose the radio receiver of claim 18, wherein Eggers et al disclose the power amplifiers are connected with a vehicle 's speaker system (col 2, line 66 – col 3, line 6). Eggers et al and Moers do not disclose the first audio power amplifier is connected with a vehicle speaker system and the second audio power amplifier is connected with a headphone jack. Huemann et al disclose the first audio power amplifier (18) is connected with a vehicle speaker system (20) and the second audio power amplifier (38) is connected with a headphone jack (36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the speaker system of Eggers et al and Moers in a vehicle with a headphone jack in order to allow the tuned signal to be provided to passengers traveling in a car and allow the back passenger to hear the audio signal without hearing the front passenger's audio output or vice versa.

Regarding claims 17 and 35, Eggers et al and Moers disclose radio receiver of claims 1 and 18 respectively, where Eggers et al disclose the power amplifiers are connected with a vehicle 's speaker system (col 2, line 66 – col 3, line 6). Eggers et al and Moers do not disclose the first audio power amplifier is connected with a vehicle speaker system and the second audio power amplifier is connected with a headphone jack. Huemann et al disclose the first audio power amplifier (18) is connected with a vehicle speaker system (20) and the second audio power amplifier (38) is connected with a headphone jack (36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the speaker system of Eggers et al and Moers in a vehicle with a headphone jack in order to allow the tuned signal to be

Art Unit: 2618

provided to passengers traveling in a car and allow the back passenger to hear the audio signal without hearing the front passenger's audio output or vice versa.

Regarding claim 38, Eggers et al, Moers, and Huemann disclose the audio system of claim 37, wherein Eggers disclose the audio system is configured to be installed in a vehicle (col 7, line 1-3).

Regarding claim 39, Eggers et al, Moers, and Huemann disclose the radio receiver of claim 39, wherein Moers discloses a controller (12) operably coupled to the first and second radio tuners, where the respective first and second radio tuners are configured to generate respective first and second radio signal quality signals (col 5, lines 6-67); first and second radio data system decoders (4, 7) operably coupled to the controller and the respective first and second radio tuners, the respective first and second radio data system decoders operable to provide respective first and second radio tuner RDS data that includes respective first and second tuner alternative frequencies (fig. 1; col 4, lines 42-44; col 5, lines 6-67); and the controller (12) is configured to receive the respective first and second radio tuner RDS data and the respective first and second radio signal quality output signals, and the controller (12) is further configured to independently detect that the respective first and second radio signal quality signals are less than a predetermined threshold of signal quality and, in response to the respective detections, to independently tune the respective first and second radio tuners to the respective first and second tuner alternative frequencies based on the respective detections (col 5, lines 6-67; col 6, lines 36-37).

Art Unit: 2618

Regarding claim 42, Eggers et al disclose a method of providing two radio tuner audio outputs comprising:

receiving (via 41) first and second radio tuner audio signals from respective first and second radios (34 and 35); generating respective first (output from 34) and second audio signal (output from 35) based on the respective first and second radio tuner audio signals; generating respective first and second amplified audio signal (ouput from 42 and 43) based upon the respective first and second audio signals; generating respective first and second radio tuner signal quality signals related to the first and second radio tuner audio signals (at output of 39 and 40) (fig. 3; col 2, lines 35-41; col 3, lines 16-30; col 6, lines 5-10); and outputting the first amplified processed audio output to a speaker (39). Eggers et al do not disclose the first and second audio signals are digitally processed generating respective first and second quality detections in response to detection that the first and second radio tuner signal quality signals are less than a predetermined quality threshold value; respectively tuning the first and second radio tuners to respective alternative frequencies in response to the respective first and second quality detections.

Moers disclose the first and second audio signals are digitally processed (via DSP 6) (fig. 1) (col 3, line 64 - col 4, line 4; col 4, lines 23-34); generating respective first and second quality detections in response to detection that the first and second radio tuner signal quality signals are less than a predetermined quality threshold value (based on the quality of each respective tuner being detected, AFs of that tuner are provided which carry the same program of the respective tuner); respectively tuning the first and second

Art Unit: 2618

radio tuners to respective alternative frequencies in response to the respective first and second quality detections (col 5, lines 6-67; col 6, lines 36-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to digitally process the audio signals of Eggers et al and to change to AFs of each respective tuner in order to digitally process and enhance the sound of the audio signals and to tune to other frequencies carrying the same program of the respective tuner of Eggers et al. Eggers and Moers do not disclose outputting the second amplified processed audio output to a headphone interface adapted to provide the second amplified processed audio output to a headphone. However, replacing a speaker with a headphone is well known and notoriously old in the art as disclosed by Huemann's headphone (36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to output the second amplified signal to a headphone instead of the speaker of Eggers in order to allow the user to privately listen to the audio programs without disturbing other people.

Regarding claim 43, Eggers et al, Moers and Huemann disclose the method of claim 42 wherein Moers disclose generating (via decoder 4, 7) respective first and second RDS data based on the first and second radio tuner audio signals, the respective first and second RDS data including the respective first and second alternative frequencies for the respective first and second radio tuner audio signals (col 5, lines 6-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made each of the tuner have AFs respectively to tune to another frequency broadcasting the same program which has better reception.

Art Unit: 2618

Regarding claim 44, Eggers et al, Moers, and Huemann disclose the method of claim 43, wherein Eggers disclose the first and second radios (34 and 35) is configured to be installed in a vehicle (col 7, line 1-3).

Regarding claim 45, Eggers et al, Moers, and Huemann disclose of claim 44, where Eggers disclose the speaker is positioned to provide audio to a driver of the vehicle (col 7, lines 1-3).

Regarding claim 46, Eggers et al, Moer, and Huemann disclose the method of claim 45, wherein Huemann et al disclose the where the headphone interface is positioned to provide audio to a passenger of the vehicle (via headphone jack 36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the headphone interface of Eggers et al and Moers to be provided to passengers in a vehicle in order to allow one passenger to hear the audio signal independently without hearing the audio output of the others or vice versa.

Response to Arguments

5. Applicant's arguments with respect to claims 1-6,8-9,11-12,15-18,20-22,26-27,29-30 have been considered but are not persuasive.

Regarding independent claim 1, applicant states Eggers provide only one selected input as an output to amplifiers 42 and 43. However, the examiner respectfully disagrees. Eggers disclose two of the input audio program signals, one foreground and one background, are simultaneously produced at the speakers (col 2, lines 35-41; col 3,

Art Unit: 2618

lines 16-30). Applicant argues the Moers's DSP only provide a single audio output signal from either of Eggers' radio tuners. However, as the examiner had stated above, Eggers disclose two of the input audio program signals, one foreground and one background, are simultaneously produced at the speakers. Eggers also disclose the second amplifier is configured to receive the second audio output signal. Therefore, the rejection filed 11/14/06 stands rejected as set forth in the previous office action.

Regarding claim 18, applicant states Moers does not describe Moer's second tuner providing an audio signal to DSP and only receives an audio input from Moers' first tuner. However, Moers is combined merely to show the outputs from two of Eggers' tuners are processed digitally before the outputs go to the audio amplifiers. Moers disclose a DSP (6) is connected to the output of the tuners 2 and 3 to digitally process the output therefrom. In addition, the claim does not even state the first and second audio signals are simultaneously processed. Eggers disclose two of the input audio program signals, one foreground program signal and one background signal, are produced at the speakers (col 2, lines 35-41; col 3, lines 16-30). As a result, the rejection to claim 18 is maintained.

6. Applicant's amendment with respect to new claims 35-46 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana N. Le whose telephone number is (571) 272-7891. The examiner can normally be reached on M-F 9:30-18:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LNL /Inl/ Lana N. Le
Primary Examiner
Technology Center 2600